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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,659	02/15/2006	Carl Towns	3724.1008-000	5024

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EXAMINER	
NGUYEN, KHANH TUAN	
ART UNIT	**PAPER NUMBER**
1796	
MAIL DATE	**DELIVERY MODE**
01/05/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,659	TOWNS ET AL.	
	Examiner	Art Unit	
	KHANH T. NGUYEN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-47* is/are pending in the application.

4a) Of the above claim(s) *31-40,45 and 46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-30, 41-44 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *n/a*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Final

Claim Status

1. Claims 24-30, 41-44 and 47 are currently pending in the instant application. Claims 31-40 and 45-46 have been withdrawn from further consideration.

2. The rejection of claims 24-30, 41-44 and 47 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 99/32537 (Allen), the English equivalent to U.S. Pat. 6,630,566 B1, is **maintained** as set forth in the pervious Office action mailed on 08/07/2009.

Response to Arguments

3. Applicant's arguments filed on 10/19/2009 have been fully considered but they are not persuasive.

4. In response to the Applicant's remark on page 3, Applicant argues that All does not provide any specific examples of compounds having Formula (1) where Y^1 is a phosphate atom. Thus, Allen provides no reason or motivation to select phosphate over any other of the five values for Y^1. The Examiner respectfully disagrees with the Applicant argument. As acknowledged by the Applicant, Allen discloses a compound represented by Formula (1)

where Y^1 can be a phosphate atom. Thus, one skilled in the art would have had a reason or motivation to formula a compound containing a phosphate atom as suggested by Allen. Moreover, it is known that a reference is not limited to the working examples, *see In re Fracalossi, 215 USPQ 569* (CCPA 1982). Thus, Allen need not teach or suggest specific examples of Formula (1) where Y^1 is a phosphate atom to anticipate above claims and/or render the claims obvious.

5. Applicant further argues that the material claimed in the instant claims 24 and 27 is an oligomer or polymer rather than a single repeat unit. The Examiner respectfully disagrees with the Applicant argument. A *polymer* is defined as a large molecule composed of repeating structural units typically connected by covalent chemical bonds (See Wikipedia). An *oligomer* is said to consist of a less than five monomer units, in contrast to a polymer that, at least in principle, consists of an unlimited number of monomers (See Wikipedia). Thus, the repeating units (i.e. monomers) fall within the scope of the claimed oligomer or polymer as recited in claims 24 and 27.

6. At page 4 of the remark, Applicant argues that four out of twenty five possible combinations would need to be selected in order to arrive at the two-unit oligomer as defined in Claims 24 or 47. As the number of units in the polymer of Claims 24 and 47

increases, the number of possible combinations increases as well. For example, for an oligomer having three repeat units, twelve out of one hundred and twenty five possible combinations would need to be selected in order to arrive at the two-unit oligomer as defined in Claims 24 or 47. The fraction of the "favorable" combinations (i.e. selections of values of variable Y^1 permitted by the definitions in Claims 24 and 47) falls as a power of number of repeat units. Thus, without some teaching or suggestion, one of ordinary skill in the art would not select the values of variable Y^1 that are required by Claims 24 and 47 out of all possible values described in Allen. As it is known, a multitude of effective combinations does not render any particular formulation less obvious. The fact that reference suggests multitude of possible combinations does not in and of itself make any one of those combinations less obvious. See Merck v. Biocraft, 10 USPQ2d 1843 (Fed. Cir. 1989). The fact that prior art composition and claimed composition were intended to be used for the same purpose, e.g. electroluminescent devices and switching devices as recited in claims 41-44, weighed towards obviousness.

7. At connecting page 4 and page 5 of the remark, Applicant argues that the phosphate-containing polymer of the instant application provides unexpected and numerous advantages over

polymer that only include a nitrogen, as employed in all of the examples of Allen. The Examiner respectfully disagrees with the Applicant argument. As stated above, Allen teaches and/or suggests the same or substantially same oligomer or polymer as claimed. Thus, any unexpected and advantages discovered by the Applicant is inherently or obviously present in the compound of Allen.

8. Base on the above rational, it is believed that the claimed limitations are met by the reference submitted and therefore, the rejections of record are maintained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 7:00-4:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit 1796

/KTN/
Examiner
12/29/2009